

REMARKS

The Office action of August 3, 2010, has been carefully considered.

Claims 14, 16, 17, 19 and 21 now stand rejected under 35 USC 103(a) over Schneider et al in view of Magerle and Buhler et al, newly cited. In addition, Claim 15 has additionally rejected in view of Hwang, and Claims 22-26 have been additionally rejected in view of Axelrad and Toulmin, Jr.

The Office action takes the position that Schneider et al teaches a method of compression molding plastic parts with a molded neck which is constructed such that a thin zone is bounded by a notch. The neck has a top wall which is to be broken off. Schneider does not explicitly teach the details of a compression molding tool or method.

Magerle has been cited to teach a method of compression molding plastic parts having a neck provided with an orifice. Magerle shows the tools used to perform the process.

Neither Schneider et al nor Magerle teaches the use of continuously moving tools in the molding process, or the step of applying axial thrust using continuously moving tools to remove the cap. Buhler et al is newly cited as allegedly teaching a molding method using continuously moving tools for manufacturing plastic parts having a neck provided with an orifice. Buhler et al is alleged to teach applying mechanical force to an application zone sufficient to cause a break to occur at the notch and detach the wall, which is severed after molding and removed by applying axial thrust.

The invention, as well as Schneider et al and Magerle are all directed to *compression* molding methods. Buhler et al, to the contrary, is directed to an *injection* molding method as is evident from the title of the patent, as well as column 1, line 18. Injection molding requires the feeding of molten material under pressure into a cavity having a shape defined by a static mold, where the mold must be maintained in a

static position in order for the injected material to cool and harden to form the product.

Injection molding thus requires cooling time for the injected material in the mold to solidify.

Injection molding differs from compression molding in which a softened material is provided in an open mold, and the mold is then closed in order to compress the material. In this way, the material flows into every location of the mold, which gives shape to the product. Because the material is already softened, formation and solidification are effectively immediate and continuously moving tools can be used.

Continuously moving tools cannot be used in an injection molding process, as disclosed by Buhler et al. Indeed, using continuously moving tools in an injection molding process is technically impossible, since the tools must remain motionless during the injection and cooling steps for the material. In fact, Buhler et al teaches tools which do not move continuously, but rather move in sequence.

Thus, Buhler et al does not cure the defects of the Schneider et al and Magerle references. Nothing in Buhler et al would suggest the use of continuously moving tools. Indeed, the principles of injection molding cannot in general be transferred to a compression molding process.

Applicants further take issue with the allegation made under "Response to Arguments" on pages 10 and 11 of the Office action. Applicants have previously argued that removal of the cap of Schneider et al during the molding process would be incompatible with the teachings of Schneider et al. In the Office action, it is stated that:

Schneider specifically teaches a cap designed to be removed with the application of a force in order to obtain an open neck to a bottle. Since the ability to create the opening under an applied force is a primary purpose for the shape and design in the neck region of the compression molded bottle in the teaching

of (col. 2, lines 35-36), the Examiner disagrees that the creation of the opening in Schneider is incompatible with the molding process if the creation of such an opening under an applied force is desired during the molding process, such as the method using continuously moving tools in the teaching of Buhler.

Applicants argued that removal of the cap during the molding process in Schneider et al was incompatible with Schneider et al, because Schneider et al specifically teaches against such an operation. Note column 9, lines 26 et seq, where Schneider et al states:

The tube is delivered in this form to the toothpaste packager, who fills the tube through the still-open end of the flexible main portion of the tube, then seals the latter. The tube is then placed on the market and, throughout the transport and storage phase, prior to supplying the final consumer, its neck is fully protected by the skirt. By observing the distance between the first end 44 of the skirt and the shoulder 8 located at the base of the neck 3, the user immediately can check the tamper-proofing of the tube, because this distance is very small when the cover is not on the tube, as FIG. 2 illustrates.

At the time of initial use of the product contained in the tube, the user tears the ring-shaped part 10 by subjecting it to a rotary motion with respect to the axis of the tube, by application of the fingers to the skirt (40).

Thus, what Schneider et al teaches is filling a tube through an open end of the skirt, sealing the tube and then shipping the tube to the consumer, who opens the tube by tearing off a closure. While it is clear that the closure could be torn off in the manufacturing step, Schneider et al does not teach doing it, and in fact teaches against tearing off the closure in the manufacturing step, since he desires to

have the consumer perform that step.

Hence, the presently claimed step in the molding process of applying mechanical force to the application zone sufficient to cause a break to occur at the notch and detach at a wall of the top wall, is specifically contrary to the teaching of Schneider et al.

The Office action effectively ignores the teaching of Schneider et al that the consumer should remove the closure. No reason is seen for ignoring this teaching, other than the fact that Applicants teach tearing off the wall during the molding process, and this amounts to an impermissible hindsight reconstruction of the invention.

The Hwang et al, Axelrad and Toulmin, Jr. references were discussed in the prior Amendment, and Applicants rely on that discussion.

Withdrawal of these rejections is requested.

In view of the foregoing remarks, Applicants submit that the present application is now in condition for allowance. An early allowance of the application is earnestly solicited.

Respectfully submitted,



Ira J. Schultz  
Registration No. 28666  
Attorney for Applicants  
(703) 837-9600, Ext. 23

Dennison, Schultz & MacDonald  
1727 King Street, Suite 105  
Alexandria, VA 22314